



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT9D-7F BYPASS RATIO: 5.1
 UNIQUE ID NUMBER: 1PW022 PRESSURE RATIO (π_{00}): 22.8
 COMBUSTOR: Mod V
 ENGINE TYPE: TF RATED THRUST (F_{00}) (kN): 213.5

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F ₀₀ (g/kN) or SN	48.1	96.1	72.0	4.3
AS % OF ORIGINAL LIMIT	245.4	81.5	84.2	22.1
AS % OF CAEP/2 LIMIT (NO _x)			105.2	
AS % OF CAEP/4 LIMIT (NO _x)			129.8	
AS % OF CAEP/6 LIMIT (NO _x)			147.5	
AS % OF CAEP/8 LIMIT (NO _x)			180.1	

DATA STATUS

x PRE-REGULATION
 - CERTIFICATION
 x REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F ₀₀)	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.167	0.30	0.40	46.00	
CLIMB OUT	85	2.2	1.764	0.30	0.40	34.40	
APPROACH	30	4.0	0.624	0.50	2.90	7.80	
IDLE	7	26.0	0.219	26.00	54.00	3.10	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			815	9055	19012	14424	-
NUMBER OF ENGINES				7	7	7	7
NUMBER OF TESTS				7	7	7	7
AVERAGE D _p /F ₀₀ (g/kN) or AVERAGE SN (MAX)				43.6	91.4	69.4	4.0
SIGMA (D _p /F ₀₀ in g/kN, or SN)				5.9	5.9	4.0	1.0
RANGE (D _p /F ₀₀ in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99-103
TEMPERATURE (K)	266-290
ABS HUMIDITY (kg/kg)	0.0007-0.0068

FUEL

SPEC	Jet A
H/C	1.89
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 01/11/1975-01/12/1975

REMARKS

1. Mod V combustor

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)